

Remarks

Applicants respectfully request reconsideration of this application as amended. Claims 1-5, 7 and 11-15 have been amended. No claims have been cancelled. Therefore, claims 1-15 are now presented for examination.

Claims 1-15 stand rejected under 35 U.S.C. §103(a) as being obvious over US Patent No. 6,253,209 of Chase-Salerno, et al. (hereinafter referred to as "Chase-Salerno"). Applicants submit that the present claims are patentable over Chase-Salerno. Chase-Salerno discloses a method of administering a mirrored volume group on at least one target node of a distributed processing system having multiple processors, wherein one processor is designated a control node and one or more other processors are designated target nodes. The method includes storing information on each volume group in a Node object and a Volume_Group object in a system data repository (SDR) coupled to the control node, and the at least one target node in the distributed processing system. In addition, mirroring at least one of a volume group of the at least one target node of the distributed processing system is performed, wherein the performing is initiated at the control node remote from the at least one target node. See Chase-Salerno at col. 2, ll. 38-57. Further, Chase-Salerno discloses a method for administering a volume group on at least one target node of a distributed processing system having multiple processors, with one processor being designated a control node and one or more other processors each being designated a target node (col. 2, ll. 58-67).

Claim 1 recites:

A method comprising a network computer (NC) client causing a plurality of NC clients that are booted to receive a second operating system software that is configured differently than a first operating system software in effect by replacing a first set of one or more system volumes maintained at a NC server containing the first operating system software with a second set of one or more system volumes maintained at the NC server containing second operating system software.

Applicants submit that Chase-Salerno does not disclose or suggest replacing a first set of system volumes maintained at a NC server containing OS software with a second set of volumes maintained at the NC server containing a second OS software. Instead, Chase-Salerno discloses a central workstation or central administration node that is used to administer changes made to other nodes. Thus, Chase-Salerno teaches having an administrator manage changes that are made directly on a node from a central workstation, rather than having a client node making changes to one or more other node's volume at a server. Consequently, claim 1 is patentable over Chase-Salerno.

Claims 5 and 6 depend from claim 1 and include additional limitations. Therefore, claims 5 and 6 are also patentable over Chase-Salerno.

Claim 2 recites:

A method comprising:
a network computer (NC) client causing a working copy of one or more system volumes on a NC server to be created by copying the one or more system volumes to a storage area separate from the location of the one or more system volumes, the one or more system volumes containing operating system software that is utilized by each of the plurality of NC clients; and
the NC client causing a plurality of NC clients that are subsequently booted to utilize modified operating system by modifying the working copy and replacing the one or more system volumes with the working copy.

Similar to the discussion above, Chase-Salerno does not disclose or suggest an NC client causing a plurality of NC clients that are subsequently booted to utilize modified operating system by modifying the working copy and replacing the one or more system volumes with the working copy. As a result, claim 2 is patentable over Chase-Salerno for the reasons discussed above with respect to claim 1. Since claims 7 and 8 depend from claim 2 and include additional limitations, claims 7 and 8 are also patentable over Chase-Salerno.

Claim 3 recites:

A method comprising:
a network computer (NC) client booting from a boot image provided by a NC server, the boot image including information identifying the location of one or more system volumes on the NC server, the one or more system volumes containing operating system software;
creating a working copy of the one or more system volumes by copying the one or more system volumes to a storage area separate from the location of the one or more system volumes; and
modifying the operating system software supplied by the NC server to subsequently booted NC clients by modifying the working copy and replacing the one or more system volumes with the working copy.

Thus, for the reasons described above with respect to claim 1, claim 3 is also patentable over Chase-Salerno. Because claims 9 and 10 depend from claim 3 and include additional limitations, claims 9 and 10 are also patentable over Chase-Salerno.

Claim 11 recites:

A method comprising the steps of:
a step for a network computer (NC) client causing a working copy of one or more system volumes on a NC server to be created by copying the one or more system volumes to a storage area separate from the location of the one or more system volumes, the one or more system volumes containing operating system software that is utilized by each of the plurality of NC clients;
and
a step for the NC client causing those a plurality of NC clients that are subsequently booted to utilize a modified operating system by modifying the working copy and replacing the one or more system volumes with the working copy.

Accordingly, for the reasons described above with respect to claim 1, claim 11 is also patentable over Chase-Salerno.

Claim 12 recites:

A machine-readable medium having stored thereon data representing sequences of instructions, the sequences of instructions which, when executed by a processor, cause the processor to perform:
a network computer (NC) client causing a working copy of one or more system volumes on a NC server to

be created by copying the one or more system volumes to a storage area separate from the location of the one or more system volumes, the one or more system volumes containing operating system software that is utilized by each of the plurality of NC clients; and a plurality of NC clients that are subsequently booted to utilize a modified operating system by modifying the working copy and replacing the one or more system volumes with the working copy.

Consequently, for the reasons described above with respect to claim 1, claim 12 is also patentable over Chase-Salerno.

Claim 13 recites:

A method comprising:
causing a plurality of network computer (NC) clients that are booted to utilize a modified operating system by:
receiving a request to create a working copy of one or more system volumes, the one or more system volumes containing operating system software that is utilized by the plurality of NC clients;
in response to receiving the request, creating the working copy by copying the one or more system volumes to a storage area separate from the location of the one or more system volumes;
receiving modifications to the working copy;
updating the working copy in response to the receiving modifications; and
replacing the one or more system volumes with the working copy.

Therefore, for the reasons described above with respect to claim 1, claim 13 is also patentable over Chase-Salerno.

Claim 14 recites:

An apparatus comprising:
a network computer (NC) server comprising a first set of one or more system volumes;
a plurality of NC clients, wherein one of the plurality of NC clients is configured to cause those of the plurality of NC clients that are subsequently booted to receive a second operating system that is configured differently than a first operating system in effect by replacing a first set of one or more system volumes maintained at the NC server containing the first

operating system software with a second set of one or more system volumes containing second operating system software operating system that is configured differently that that currently in effect by replacing the one or more system volumes with one or more different system volumes.

Thus, for the reasons described above with respect to claim 1, claim 14 is also patentable over Chase-Salerno.

Claim 15 recites

An apparatus comprising:
a network computer (NC) server means comprising
a first set of one or more system volume means;
a NC client means for causing a plurality of NC clients means that are subsequently booted to receive a second operating system software that is configured differently than a first operating system in effect by replacing a first set of one or more system volume means maintained at the NC server containing the first operating system software with a second set of one or more system volume means containing second operating system software operating system that is configured differently that that currently in effect by replacing the one or more system volumes with one or more different system volume means.

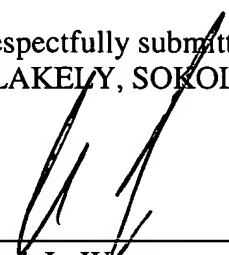
Therefore, for the reasons described above with respect to claim 1, claim 15 is also patentable over Chase-Salerno.

Applicants respectfully submit that the rejections have been overcome, and that the claims as amended are in condition for allowance. Accordingly, applicants respectfully request the rejections be withdrawn and the claims be allowed.

The Examiner is requested to call the undersigned at (303)740-1980 if there remains any issue with allowance of the case.

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: February 18, 2003



Mark L. Watson
Reg. No. 46,322

Blakely, Sokoloff, Taylor & Zafman, LLP
12400 Wilshire Boulevard, 7th Floor
Los Angeles, California 90025-1026
(303) 740-1980

AMENDMENTS IN A MARKED VERSION

1. (Twice Amended) A method comprising a network computer (NC) client causing a plurality of NC clients that are booted to receive a second operating system software that is configured differently than [that currently] a first operating system software in effect by replacing a first set of one or more system volumes [on] maintained at a NC server containing the first operating system software with a second set of one or more [different]system volumes maintained at the NC server containing second operating system software.

2. (Twice Amended) A method comprising:
a network computer (NC) client causing a working copy of one or more system volumes on a NC server to be created by copying the one or more system volumes to a storage area separate from the location of the one or more system volumes, the one or more system volumes containing operating system software that is utilized by each of the plurality of NC clients; and

the NC client causing a plurality of NC clients that are subsequently booted to utilize [an altered] modified operating system by modifying the working copy and replacing the one or more system volumes with the working copy.

3. (Twice Amended) A method comprising:
a network computer (NC) client booting from a boot image provided by a NC server, the boot image including information identifying the location of one or more system volumes on the NC server, the one or more system volumes containing operating system software;

creating a working copy of the one or more system volumes by copying the one or more system volumes to a storage area separate from the location of the one or more system volumes; and

[changing] modifying the operating system software supplied by the NC server to subsequently booted NC clients by modifying the working copy and replacing the one or more system volumes with the working copy.

4. (Amended) The method of claim 1, further comprising the NC client causing those of the plurality of NC clients that subsequently open an application to utilize [an altered] a modified version of the application by [the] replacing the first set of one or more system volumes, wherein the first set of one or more system volumes further comprise application software.

5. (Amended) The method of claim 1, wherein at least one NC client of the plurality of NC clients is not rebooted for a period of time after [the] replacing the first set of one or more system volumes.

7. (Amended) The method of claim 2, further comprising the NC client causing those of the plurality of NC clients that subsequently open an application to utilize [an altered] a modified version of the application by [the modifying and]replacing the one or more system volumes, wherein the one or more system volumes further comprise application software.

11. (Amended) A method comprising the steps of:

a step for a network computer (NC) client causing a working copy of one or more system volumes on a NC server to be created by copying the one or more system volumes

to a storage area separate from the location of the one or more system volumes, the one or more system volumes containing operating system software that is utilized by each of the plurality of NC clients; and

a step for the NC client causing those a plurality of NC clients that are subsequently booted to utilize [an altered] a modified operating system by modifying the working copy and replacing the one or more system volumes with the working copy.

12. (Amended) A machine-readable medium having stored thereon data representing sequences of instructions, the sequences of instructions which, when executed by a processor, cause the processor to perform:

a network computer (NC) client causing a working copy of one or more system volumes on a NC server to be created by copying the one or more system volumes to a storage area separate from the location of the one or more system volumes, the one or more system volumes containing operating system software that is utilized by each of the plurality of NC clients; and

a plurality of NC clients that are subsequently booted to utilize [an altered] a modified operating system by modifying the working copy and replacing the one or more system volumes with the working copy.

13. (Amended) A method comprising:

causing a plurality of network computer (NC) clients that are booted to utilize [an altered] a modified operating system by:

receiving a request to create a working copy of one or more system volumes, the one or more system volumes containing operating system software that is utilized by the plurality of NC clients;

in response to [the] receiving [a] the request, creating the working copy by copying the one or more system volumes to a storage area separate from the location of the one or more system volumes;

receiving modifications to the working copy;

updating the working copy in response to the receiving modifications; and

replacing the one or more system volumes with the working copy.

14. (Amended) An apparatus comprising:

a network computer (NC) server comprising a first set of one or more system volumes;

a plurality of NC clients, wherein one of the plurality of NC clients is configured to cause those of the plurality of NC clients that are subsequently booted to receive a second operating system that is configured differently than [that currently] a first operating system in effect by replacing a first set of one or more system volumes maintained at the NC server containing the first operating system software with a second set of one or more [different] system volumes containing second operating system software operating system that is configured differently than that currently in effect by replacing the one or more system volumes with one or more different system volumes.

15. (Amended) An apparatus comprising:

a network computer (NC) server means comprising a first set of one or more system volume means;

a NC client means for causing a plurality of NC clients means that are subsequently booted to receive a second operating system software that is configured differently [that that currently] than a first operating system in effect by replacing a first

set of one or more system volume means maintained at the NC server containing the first operating system software with a second set of one or more [different]system volume means containing second operating system software operating system that is configured differently that that currently in effect by replacing the one or more system volumes with one or more different system volume means.